IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for fabrication of a semiconductor device ~~on substrate, the semiconductor device having a plurality of layers~~, the method including:

(a) providing a wafer comprising a substrate with multiple epitaxial layers mounted on a substrate, the multiple epitaxial layers comprising an active region where light is able to be generated ~~applying a seed layer of a thermally conductive metal to a first surface of the semiconductor device~~;

(b) forming a first ohmic contact layer on a first surface of the multiple epitaxial layers, the first surface being remote from the substrate, the first ohmic contact layer comprising multiple metal layers and being a mirror;

(c) forming ~~electroplating~~ a relatively thick layer of ~~the~~ a thermally conductive metal adjacent to the first ohmic contact layer ~~on the seed layer~~, the thermally conductive metal being of sufficient thickness to provide a heat sink; and

[[(c)]](d) removing the substrate.

2. (Currently amended) A method as claimed in claim 1, wherein the first ohmic contact layer ~~surface~~ is coated with an adhesion layer prior to application of ~~the~~ a seed layer of thermally conductive metal, and wherein the relatively thick layer is formed on the seed layer by electroplating.

3. (Currently amended) A method as claimed in claim [[1]] 2, wherein the seed layer is patterned with photoresist patterns before the electroplating step ~~(b)~~, and the electroplating of the relatively thick layer is between the photoresist patterns.

4. (Cancelled)

5. (Currently amended) A method as claimed in claim [[1]] 3, wherein between steps ~~(b) and~~ (c) and (d) there is performed the additional step of annealing the layers to improve adhesion, and the photoresist patterns are of a height in the range 15 to 500 micrometers, a thickness in the range 3 to 500 micrometers, and a spacing in the range of 200 to 2,000 microns.

6-8. (Cancelled)

9. (Currently amended) A method as claimed in claim 2 [[1]], wherein the seed layer is electroplated ~~in step (b)~~ without patterning, patterning being performed subsequently by photoresist patterning and then wet etching.

10. (Cancelled)

11. (Currently amended) A method as claimed in claim 9 [[3]], wherein patterning is by laser beam micro-machining of the relatively thick layer.

12. (Previously presented) A method as claimed in claim 3, wherein the relatively thick layer is of a height no greater [[that]] than the photoresist height.

13. (Previously presented) A method as claimed in claim 3, wherein the relatively thick layer of thermally conductive metal is electroplated to a height greater than the photoresist and is subsequently thinned, thinning being by polishing or wet etching.

14. (Cancelled)

15. (Currently amended) A method as claimed in claim 1, wherein after step ~~(c)~~ (d) there is included an extra step of forming on a second surface of the multiple epitaxial layers ~~semiconductor device~~ a second ohmic contact layer, the second ohmic contact layer being selected from the group consisting of: opaque, transparent, and semi-transparent, the second ohmic contact layer being one of blank and patterned, bonding pads being formed on the second ohmic contact layer.

16-17. (Cancelled)

18. (Currently amended) A method as claimed in claim 1, wherein after step ~~(c)~~ (d) ohmic contact formation and subsequent process steps are carried out, the subsequent process steps including deposition of wire bond pads.

19. (Currently amended) A method as claimed in claim 15, wherein the ~~exposed~~ second surface is cleaned and etched before the second ohmic contact layer is

deposited, the second ohmic contact layer not covering the whole area of the second surface.

20. (Cancelled)

21. (Currently amended) A method as claimed in claim 15, wherein a plurality of semiconductor devices are fabricated on the wafer, and wherein after forming the second ohmic contact layer there is included testing of the semiconductor devices on the wafer ~~epitaxial layers~~, and separating the layers into individual devices.

22. (Cancelled)

23. (Currently amended) A method as claimed in claim 1, wherein ~~the~~ a plurality of semiconductor devices are fabricated on the wafer without one or more selected from the group consisting of: lapping, polishing and dicing.

24. (Currently amended) A method as claimed in claim 15, wherein ~~the semiconductor device comprises a plurality of epitaxial layers, a first ohmic contact layer being on a first surface of the epitaxial layers remote from the substrate;~~ the first ohmic contact ~~layers being~~ layer is on p-type layers of the multiple epitaxial layers.

25. (Currently amended) A method as claimed in claim 24, wherein the second ohmic contact layer is formed on n-type layers of the multiple expitaxial layers.

26. (Currently amended) A method as claimed in claim 1, wherein after step (d) ~~(c)~~, dielectric films are deposited on the multiple epitaxial layers and openings are cut in the dielectric films and second ohmic contact layer and bond pads deposited on the multiple epitaxial layers.

27. (Cancelled)

28. (Currently amended) A method as claimed in claim [[27]] 1, wherein the thermally conductive metal comprises copper and the multiple epitaxial layers comprise multiple GaN-related layers.

29. (Withdrawn) A semiconductor device comprising epitaxial layers, first ohmic contact layers on a first surface of the epitaxial layers, a relatively thick layer of a thermally conductive metal on the first ohmic contact layer to form a heat sink, and a second ohmic contact layer on a second surface of the epitaxial layers, an adhesive layer on the first ohmic contact layer between the first ohmic contact layer and the relatively thick layer, the relatively thick layer being applied by electroplating.

30. (Withdrawn) A semiconductor device as claimed in claim 29, wherein there is a seed layer of the thermally conductive metal, applied to the adhesive layer.

31. (Withdrawn) A semiconductor device as claimed in claim 29, wherein the relatively thick layer is at least 50 micrometers thick, and the second ohmic contact layer is a thin layer in the range of from 3 to 500 nanometers.

32. (Cancelled)

33. (Withdrawn) A semiconductor device as claimed in claim 29, wherein the second ohmic contact layer is selected from the group consisting of: opaque, transparent, and semi-transparent, and includes bonding pads.

34. (Cancelled)

35. (Withdrawn) A semiconductor device as claimed in claim 29, wherein the thermally conductive metal is copper and the epitaxial layers comprise multiple GaN-related epitaxial layers.

36. (Withdrawn) A semiconductor device as claimed in claim 29, wherein the semiconductor device is selected from the group consisting of: a light emitting device, and a transistor device.

37. (Withdrawn) A semiconductor device comprising epitaxial layers, a first ohmic contact layer on a first surface of the epitaxial layers, an adhesive layer on the first ohmic contact layer, and a seed layer of a thermally conductive metal on the adhesive layer.

38. (Withdrawn) A semiconductor device as claimed in claim 37, further comprising a relatively thick layer of the thermally conductive metal on the seed

layer, the relatively thick layer acting as a heat sink, and a second ohmic contact layer on a second surface of the epitaxial layers, the second ohmic contact layer being a thin layer in the range of from 3 to 500 nanometers.

39. (Cancelled)

40. (Withdrawn) A semiconductor device as claimed in claim 37, wherein the second ohmic contact layer comprises bonding pads and is selected from the group consisting of: opaque, transparent, and semi-transparent.

41. (Withdrawn) A semiconductor device as claimed in claim 37, wherein the thermally conductive metal comprises copper, and the epitaxial layers comprise GaN-related layers.

42. (Withdrawn) A method of fabrication of a semiconductor device, the method including:

(a) on a substrate with a plurality of epitaxial layers comprising multiple GaN-related epitaxial layers, forming a first ohmic contact layer on a first surface of the epitaxial layers;

(b) removing the substrate from the epitaxial layers; and

(c) forming a second ohmic contact layer on a second surface of the epitaxial layers, the second ohmic contact layer having bonding pads formed thereon.

43. (Withdrawn) A method as claimed in claim 42, wherein the second ohmic contact layer is selected from the group consisting of: opaque, transparent, and semi-transparent and is one of: blank, and patterned.

44. (Cancelled)

45. (Withdrawn) A semiconductor device fabricated by the method of claim 42.

46. (Withdrawn) A semiconductor device as claimed in claim 45, wherein the semiconductor device is one of: a light emitting device, and a transistor device.

47-48. (Cancelled)

49. (Withdrawn) A method for fabrication of a light emitting device on a substrate, the light emitting device having a plurality of layers with an active layer, the method including:

(a) electroplating a layer of a thermally conductive material onto a surface of the semiconductor device remote from the substrate and close to the active layer; and

(b) removing the substrate.

50. (Withdrawn) A method as claimed in claim 49, wherein the thermally conductive layer is as a heat sink.

51. (Withdrawn) A method as claimed in claim 49, wherein the thermally conductive layer is of a thickness in the range of from 3 microns to 300 microns.

52. (Withdrawn) A method as claimed in claim 49, wherein the thermally conductive layer is of a thickness of from 50 to 200 microns.

53. (Cancelled)